

FILE 'MEDLINE, BIOSIS, EMBASE, CAPLUS' ENTERED AT 07:17:12 ON 26 MAR 2003

	E JACOBI C/IN,AU
L1	299 S E4 OR E9-28
L2	496 S TAUROLIDIN?
L3	218 S TAUROLIN
L4	78 S TAURULTAM
L5	575 S L2 OR L3 OR L4
L6	22 S L1 AND L5
L7	11 DUP REM L6 (11 DUPLICATES REMOVED)
	E REDMOND PAUL/IN,AU
L8	12 S E1-6
	E PFIRRMANN ROLF/IN,AU
L9	101 S E1-9
L10	112 S L8 OR L9
L11	58 S L10 AND L5
L12	45 DUP REM L11 (13 DUPLICATES REMOVED)

L7 ANSWER 1 OF 11 MEDLINE DUPLICATE 1

ACCESSION NUMBER: 2002227334 MEDLINE  
DOCUMENT NUMBER: 21960023 PubMed ID: 11964081  
TITLE: Effects of **taurolidine** and octreotide on port site and liver metastasis after laparoscopy in an animal model of pancreatic cancer.  
AUTHOR: Wenger F A; Kilian M; Braumann C; Neumann A; Ridders J; Peter F J; Guski H; **Jacobi C A**  
CORPORATE SOURCE: Department of General, Visceral, Vascular and Thoracic Surgery, Humboldt-University of Berlin, Germany..  
Charipanc@aol.com  
SOURCE: CLINICAL AND EXPERIMENTAL METASTASIS, (2002) 19 (2) 169-73.  
Journal code: 8409970. ISSN: 0262-0898.  
PUB. COUNTRY: Netherlands  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200205  
ENTRY DATE: Entered STN: 20020420  
Last Updated on STN: 20020517  
Entered Medline: 20020516

AB Port site metastasis is a dreadful event following laparoscopy; however, the exact pathomechanism is still unknown. In order to prevent trocar metastasis we determined the effects of intraperitoneal lavage with either **taurolidine** or octreotide on port site and liver metastasis after laparoscopy in a chemically induced, solid pancreatic adenocarcinoma. Pancreatic adenocarcinoma was induced in 60 Syrian hamsters by weekly injection of 10 mg/kg body weight N-nitrosobis-2-oxopropylamine s.c. for 10 weeks. Six weeks later, a laparoscopic pancreatic biopsy was performed by the use of a pneumoperitoneum with carbon dioxide (12 mm Hg), followed by an abdominal irrigation with 5 ml normal saline (group 1, n = 20), 5 ml 0.5% **taurolidine** (group 2, n = 20) or 5 ml octreotide (20 mg/ml) (group 3, n = 20). After 8 weeks, all hamsters were sacrificed and histopathologically examined. There was only one macroscopic visible primary tumor in the **taurolidine** group (5.9%), compared to 42.1% in the saline group and 62.5% in the octreotide group ( $P < 0.05$ ). The size of carcinomas was smaller in the saline group than after octreotide irrigation (median 6, range 2-25 vs. median 70, range 40-160 mm<sup>2</sup>,  $P < 0.05$ ). The number of liver metastases per animal was increased after saline irrigation (median 4, range 2-6), compared to **taurolidine** (median 2, range 1-3) or octreotide (median 2.5, range 2-4) ( $P < 0.05$ ). Port site metastases were found in 36.8% after saline, in 37.5% after octreotide and in 0% after **taurolidine** irrigation ( $P < 0.05$ ). Thus port site metastasis was effectively prevented by **taurolidine** irrigation after staging-laparoscopy in pancreatic cancer.

L7 ANSWER 2 OF 11 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.

ACCESSION NUMBER: 2001331852 EMBASE  
TITLE: Laparoscopy: Basic science and future directions.  
AUTHOR: **Jacobi C.A.**; De Cuyper K.I.; Muller J.M.  
CORPORATE SOURCE: Dr. C.A. Jacobi, Department of Surgery, Humboldt University of Berlin, Schumannstrasse 20/21, 10117 Berlin, Germany.  
christoph.jacobi@charite.de  
SOURCE: Surgical Oncology Clinics of North America, (2001) 10/3 (679-691).  
Refs: 76  
ISSN: 1055-3207 CODEN: SOCAF7  
COUNTRY: United States  
DOCUMENT TYPE: Journal; General Review  
FILE SEGMENT: 009 Surgery  
016 Cancer  
026 Immunology, Serology and Transplantation  
037 Drug Literature Index  
048 Gastroenterology  
LANGUAGE: English  
SUMMARY LANGUAGE: English

AB Although the problem of port-site metastases is mainly related to the surgeon, the technique, manipulation of the tumor-bearing organ, and some other factors related to laparoscopy itself have been shown to influence tumor growth. The different experimental studies about basic research and possible new therapeutic strategies, including instillation of cytotoxic and immune modulating agents in combination with laparoscopy, are presented and discussed.

L7 ANSWER 3 OF 11 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.DUPLICATE 2

ACCESSION NUMBER: 2001365797 EMBASE  
TITLE: Influence of intraperitoneal and systemic application of **taurolidine** and **taurolidine**/heparin during laparoscopy on intraperitoneal and subcutaneous

tumour growth in rats.  
 AUTHOR: Braumann C.; Ordemann J.; Wildbrett P.; Jacobi C.A.  
 CORPORATE SOURCE: Dr. C.A. Jacobi, Department of General Surgery, Humboldt  
 University of Berlin, Charite, Schumannstr. 20/21, D-10117  
 Berlin, Germany. christoph.jacobi@charite.de  
 SOURCE: Clinical and Experimental Metastasis, (2001) 18/7  
 (547-552).  
 Refs: 37  
 ISSN: 0262-0898 CODEN: CEXMD2  
 COUNTRY: Netherlands  
 DOCUMENT TYPE: Journal; Article  
 FILE SEGMENT: 016 Cancer  
 037 Drug Literature Index  
 LANGUAGE: English  
 SUMMARY LANGUAGE: English

AB Background: Recent clinical and experimental studies investigated the problem and possible pathomechanisms of port-site metastases after laparoscopic resection of malignant tumours. A generally accepted approach to prevent these tumour implantations does not exist so far. Methods: After subcutaneous and intraperitoneal injection of 10(4) cells of colon adenocarcinoma (DHD/K12/TRb) the influences of either taurolidine or taurolidine/heparin on intraperitoneal and subcutaneous tumour growth were investigated in 105 rats undergoing laparoscopy with carbon dioxide. The animals were then randomised into seven groups. A pneumoperitoneum was established using carbon dioxide for 30 min (8 mmHg). Three incisions were used: median for the insufflation needle, and a right and left approach in the lower abdomen for trocars. To investigate the intraperitoneal (local) influence of either taurolidine and heparin on tumour growth the substances were instilled intraperitoneally. Systemic effects were expected when the substances were applied intravenously (iv). Synergistic influences were tested when both application forms were combined. The number and the weight of tumours as well as the incidence of abdominal wall and port-site metastases were determined four weeks after intervention. Blood was taken to evaluate the influences of taurolidine and heparin on systemic immunologic reactions: seven days before laparoscopy, two hours, two days, seven days, and four weeks after operation, and the peripheral lymphocytes were determined. Results: Intraperitoneal (ip) tumour weight in rats receiving taurolidine (median 7 mg) and taurolidine/heparin (0 mg) intraperitoneally was significantly reduced when compared to the control group (52 mg) (P = 0.001). There was no difference of subcutaneous tumour growth among the groups (P = 0.4). Trocar recurrences were decreased when taurolidine was applied ip (3/15), ipiv (4/15), and ip in combination with heparin (4/15) in comparison to the control group (10/15). Immediately after intervention treated and untreated groups showed a peripheral lymphopenia. Conclusions: The intraperitoneal therapy with taurolidine and the combination with heparin inhibits the intraperitoneal tumour growth and trocar recurrences. Neither the intraperitoneal nor the systemic application or the combination of taurolidine and heparin did reduce the subcutaneous tumour growth. The intervention caused a lymphopenia which was compensated on day two.

L7 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:656289 CAPLUS  
 DOCUMENT NUMBER: 133:246909  
 TITLE: Influence of perioperative intravenous and intraperitoneal application of taurolidine- or taurolidine/heparin in laparoscopic surgery on intra- and extraperitoneal tumor growth  
 AUTHOR(S): Braumann, C.; Jacobi, C. A.; Ordemann, J.; Stosslein, R.; Muller, J. M.  
 CORPORATE SOURCE: Chirurgische Klinik der Humboldt Universitat zu Berlin, Charite, Berlin, 10098, Germany  
 SOURCE: Chirurgisches Forum fuer Experimentelle und Klinische Forschung (2000) 691-695  
 CODEN: CFEKA7; ISSN: 0303-6227  
 PUBLISHER: Springer-Verlag  
 DOCUMENT TYPE: Journal  
 LANGUAGE: German

AB A generally accepted approach to prevent port site metastases after laparoscopic surgery does not exist. The influence of i.p. and i.v. application of taurolidine and heparin on i.p. and s.c. tumors as well as port site metastases was measured in a rat (BD IX) model of colon cancer. While tumor growth was suppressed by i.p. application of taurolidine and heparin, systemic application of the agents was assocd. with a slight increase of tumor growth. The combination of i.p. and i.v. application did not show synergistic effects on inhibition of tumor growth. S.c. growth was not decreased by i.p. application, and single i.v. application caused even a slight increase of s.c. growth. Incidence of port site metastases was only reduced after i.p. instillation

of the agents. I.p. tumor growth was only reduced after i.p. instillation of heparin and taurolidine while single i.v. application showed no redn. Combination of i.p. and i.v. application did not result in synergistic effects on the inhibition of tumor growth.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 5 OF 11 MEDLINE DUPLICATE 3  
ACCESSION NUMBER: 2001636266 MEDLINE  
DOCUMENT NUMBER: 21543946 PubMed ID: 11688959  
TITLE: Influence of intraperitoneal and systemic application of taurolidine and taurolidine/heparin during laparoscopy on intraperitoneal and subcutaneous tumour growth in rats.  
AUTHOR: Braumann C; Ordemann J; Wildbrett P; Jacobi C A  
CORPORATE SOURCE: Department of General, Visceral, Vascular and Thoracic Surgery Humboldt University of Berlin, Charite, Germany.  
SOURCE: CLINICAL AND EXPERIMENTAL METASTASIS, (2000) 18 (7) 547-52. Journal code: 8409970. ISSN: 0262-0898.  
PUB. COUNTRY: Netherlands  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200112  
ENTRY DATE: Entered STN: 20011105  
Last Updated on STN: 20020123  
Entered Medline: 20011204

AB BACKGROUND: Recent clinical and experimental studies investigated the problem and possible pathomechanisms of portsite metastases after laparoscopic resection of malignant tumours. A generally accepted approach to prevent these tumour implantations does not exist so far. METHODS: After subcutaneous and intraperitoneal injection of 10(4) cells of colon adenocarcinoma (DHD/K12/TRb) the influences of either taurolidine or taurolidine/heparin on intraperitoneal and subcutaneous tumour growth were investigated in 105 rats undergoing laparoscopy with carbon dioxide. The animals were then randomised into seven groups. A pneumoperitoneum was established using carbon dioxide for 30 min (8 mmHg). Three incisions were used: median for the insufflation needle, and a right and left approach in the lower abdomen for trocars. To investigate the intraperitoneal (local) influence of either taurolidine and heparin on tumour growth the substances were instilled intraperitoneally. Systemic effects were expected when the substances were applied intravenously (iv). Synergistic influences were tested when both application forms were combined. The number and the weight of tumours as well as the incidence of abdominal wall and port-site metastases were determined four weeks after intervention. Blood was taken to evaluate the influences of taurolidine and heparin on systemic immunologic reactions: seven days before laparoscopy. two hours, two days. seven days, and four weeks after operation, and the peripheral lymphocytes were determined. RESULTS: Intraperitoneal (ip) tumour weight in rats receiving taurolidine (median 7 mg) and taurolidine/heparin (0 mg) intraperitoneally was significantly reduced when compared to the control group (52 mg) ( $P = 0.001$ ). There was no difference of subcutaneous tumour growth among the groups ( $P = 0.4$ ). Trocar recurrences were decreased when taurolidine was applied ip (3/15). ipiv (4/15), and ip in combination with heparin (4/15) in comparison to the control group (10/15). Immediately after intervention treated and untreated groups showed a peripheral lymphopenia. CONCLUSIONS: The intraperitoneal therapy with taurolidine and the combination with heparin inhibits the intraperitoneal tumour growth and trocar recurrences. Neither the intraperitoneal nor the systemic application or the combination of taurolidine and heparin did reduce the subcutaneous tumour growth. The intervention caused a lymphopenia which was compensated on day two.

L7 ANSWER 6 OF 11 MEDLINE DUPLICATE 4  
ACCESSION NUMBER: 1999457526 MEDLINE  
DOCUMENT NUMBER: 99457526 PubMed ID: 10526040  
TITLE: Influence of different gases and intraperitoneal instillation of antiadherent or cytotoxic agents on peritoneal tumor cell growth and implantation with laparoscopic surgery in a rat model.  
AUTHOR: Jacobi C A; Wildbrett P; Volk T; Muller J M  
CORPORATE SOURCE: Department of Surgery, Humboldt-University of Berlin, Schumannstrasse 20/21, 10098 Berlin, Germany.  
SOURCE: SURGICAL ENDOSCOPY, (1999 Oct) 13 (10) 1021-5. Journal code: 8806653. ISSN: 0930-2794.  
PUB. COUNTRY: GERMANY: Germany, Federal Republic of  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals

ENTRY MONTH: 199911  
ENTRY DATE: Entered STN: 20000111  
Last Updated on STN: 20000111  
Entered Medline: 19991103

AB BACKGROUND: A generally accepted approach to prevent tumor implantation with laparoscopic surgery does not exist. Alternative gases in combination with intraperitoneal instillation of different antiadherent or cytotoxic agents have not been evaluated. METHODS: The effect of taurolidine, heparin, and povidone-iodine on the growth of colon adenocarcinoma DHD/K12/TRb was measured in rats undergoing laparoscopy with carbon dioxide (n = 40), helium (n = 40), or xenon (n = 40). In the procedure, 10(4) tumor cells were administered intraperitoneally, and pneumoperitoneum was established over 30 min at 8 mmHg with the different gases. The rats additionally received intraperitoneal instillation with one of the following: 1 ml of Ringer's solution, 1 ml of 0.5% taurolidine, 1 ml 0.5% taurolidine with heparin (10 U/ml), or 1 ml 0.25% of povidone-iodine. Tumor growth was measured after 4 weeks. RESULTS: Median intraperitoneal tumor weight was lower in rats receiving taurolidine (CO(2): 10 mg; helium: 50 mg; xenon: 39.5 mg) or taurolidine with heparin (CO(2): 4 mg; helium: 4.5 mg; xenon: 46.5 mg) in all gas groups than in the control groups (CO(2): 427 mg; helium: 268 mg; xenon: 345 mg) (p < 0.001). Whereas povidone-iodine caused significantly lower tumor growth in the CO(2) group (56.5 mg) (p < 0.01), the combination of helium (145 mg) and xenon (457 mg) with povidone-iodine produced no reduction of tumor growth as compared with the control groups (helium: 268 mg; xenon: 345 mg). CONCLUSIONS: Taurolidine and taurolidine with heparin significantly inhibit intraperitoneal tumor growth, with different gases used for pneumoperitoneum. Only povidone-iodine caused significant decrease of tumor growth in combination with CO(2). The combination of xenon and povidone-iodine should not be used in patients with cancer because of increased tumor growth.

L7 ANSWER 7 OF 11 MEDLINE DUPLICATE 5  
ACCESSION NUMBER: 2000036988 MEDLINE  
DOCUMENT NUMBER: 20036988 PubMed ID: 10567800  
TITLE: New therapeutic strategies to avoid intra- and extraperitoneal metastases during laparoscopy: results of a tumor model in the rat.  
AUTHOR: Jacobi C A; Peter F J; Wenger F A; Ordemann J; Muller J M  
CORPORATE SOURCE: Department of Surgery, Humboldt University of Berlin, Germany.  
SOURCE: DIGESTIVE SURGERY, (1999) 16 (5) 393-9.  
Journal code: 8501808. ISSN: 0253-4886.  
PUB. COUNTRY: Switzerland  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200005  
ENTRY DATE: Entered STN: 20000606  
Last Updated on STN: 20000606  
Entered Medline: 20000519

AB BACKGROUND: Therapeutic strategies to prevent port site recurrences in laparoscopy surgery of malignancies have not been investigated until now. METHODS: The effects of taurolidine, heparin, and povidone iodine on the growth of rat and human colon adenocarcinoma as well as gallbladder carcinoma were investigated in vitro. Furthermore, cytokine release of growth-stimulating IL-1beta by peritoneal macrophages was measured after incubation with carbon dioxide and additional incubation with the different agents. In the third experiment, prevention of intra- and extraperitoneal metastases by intraperitoneal instillation of the different agents during laparoscopy was investigated in a colon carcinoma model in the rat. Tumor cells were administered intraperitoneally in 100 rats, and pneumoperitoneum (8 mm Hg) was established over 30 min with carbon dioxide. Rats received either tumor cells, cells + heparin, cells + povidone iodine, cells + taurolidine, or cells + taurolidine + heparin. RESULTS: In vitro, tumor cell growth decreased after incubation with taurolidine, taurolidine/heparin, and povidone iodine. Cytokine release was stimulated by incubation with carbon dioxide and could only be suppressed by incubation with taurolidine in vitro. In vivo, intraperitoneal tumor weight was lower in rats receiving heparin (251 +/- 153 mg) and povidone iodine (134 +/- 117 mg) compared to the control group (541 +/- 291 mg), but even less when taurolidine (79 +/- 82 mg) or taurolidine/heparin (18.3 +/- 30 mg) were instilled. CONCLUSION: Heparin slightly inhibits intraperitoneal tumor growth in vivo, while povidone iodine and taurolidine cause a significant decrease in tumor cell growth in vitro as well as intraperitoneal tumor growth in vivo. Cytokine release of peritoneal macrophages is only suppressed by taurolidine. Total

tumor take and trocar metastases are only suppressed by  
taurolidine and taurolidine/heparin. Copyright Copyright  
1999 S. Karger AG, Basel

L7 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1997:549468 CAPLUS  
DOCUMENT NUMBER: 127:145180  
TITLE: Agent for prevention of tumor cell transfer and growth  
of trocar metastases in open and laparoscopic surgery  
of malignant tumors  
INVENTOR(S): Mueller, Joachim Michael; Jacobi, Christoph  
Andreas  
PATENT ASSIGNEE(S): Mueller, Joachim Michael, Germany; Jacobi, Christoph  
Andreas  
SOURCE: Ger. Offen., 5 pp.  
CODEN: GWXXBX  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19606897	A1	19970814	DE 1996-19606897	19960213
DE 19606897	C2	20020829		

PRIORITY APPLN. INFO.: DE 1996-19606897 19960213

AB Development of trocar metastases is inhibited by administration of  
taurolidine, alone or combined with heparin or heparin derivs.  
Thus, growth and adherence of colon carcinoma cells in vitro was inhibited  
by taurolidine (300 .mu.L 2% soln./mL growth medium).

L7 ANSWER 9 OF 11 MEDLINE

DUPLICATE 6

ACCESSION NUMBER: 97464335 MEDLINE  
DOCUMENT NUMBER: 97464335 PubMed ID: 9324156  
TITLE: Inhibition of peritoneal tumor cell growth and implantation  
in laparoscopic surgery in a rat model.  
AUTHOR: Jacobi C A; Ordemann J; Bohm B; Zieren H U; Sabat  
R; Muller J M  
CORPORATE SOURCE: Department of Surgery, Humboldt-University of Berlin,  
Germany.  
SOURCE: AMERICAN JOURNAL OF SURGERY, (1997 Sep) 174 (3) 359-63.  
Journal code: 0370473. ISSN: 0002-9610.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals  
ENTRY MONTH: 199710  
ENTRY DATE: Entered STN: 19971105  
Last Updated on STN: 20000303  
Entered Medline: 19971021

AB BACKGROUND: The pathogenesis of portsite recurrences after laparoscopic  
surgery is still unknown, and a generally accepted approach to prevent  
tumor implantation does not exist. METHODS: The effect of  
taurolidine and heparin on growth of colon adenocarcinoma  
DHD/K12/TRb was measured in vitro and in vivo. After incubation of the  
cells with heparin or taurolidine or both substances, cell  
kinetics were determined. In a rat model (n = 60), tumor cells were  
administered intraperitoneally, and pneumoperitoneum was established over  
30 minutes. Rats received tumor cells, tumor cells + heparin, tumor cells  
+ taurolidine, or tumor cells + taurolidine + heparin.  
RESULTS: In vitro, tumor cell growth decreased after incubation with  
taurolidine and taurolidine/heparin. In vivo,  
intraperitoneal tumor weight was lower in rats receiving heparin (298 +/-  
155 mg) and taurolidine (149 +/- 247 mg) compared with the  
control group (596 +/- 278 mg) but even less when both substances were  
combined (21.5 +/- 36 mg). CONCLUSION: Heparin inhibits intraperitoneal  
tumor growth in vivo slightly, while taurolidine causes  
significant decrease of tumor cell growth in vitro as well as tumor take  
and intraperitoneal tumor growth in vivo.

L7 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1997:402635 CAPLUS  
DOCUMENT NUMBER: 127:144917  
TITLE: The influence of taurolidine on intra- and  
extraperitoneal tumor growth in laparoscopy. Results  
of a new therapeutic concept for the prevention of  
trocar metastases  
AUTHOR(S): Ordemann, J.; Jacobi, C. A.; Sabat, R.;  
Volk, H. D.; Muller, J. M.  
CORPORATE SOURCE: Chirurgische Klinik, Charite, Berlin, D-10098, Germany

SOURCE: Chirurgisches Forum fuer Experimentelle und Klinische  
Forschung (1997) 271-274  
CODEN: CFEKA7; ISSN: 0303-6227  
PUBLISHER: Springer  
DOCUMENT TYPE: Journal  
LANGUAGE: German

AB The influence of taurolidine (TAU) and heparin (HEP) on intra-  
and extraperitoneal tumor growth was studied in vitro and in vivo. While  
i.p. application of HEP influenced tumor growth and development of trocar  
metastases only slightly, TAU decreased both. The combination of both  
substances showed synergistic effects in suppression of tumor growth in  
vitro and in vivo. The prodn. of interleukin-1.beta. by  
lipopolysaccharide stimulated peritoneal macrophages was suppressed  
completely by TAU following 5 h of incubation.

L7 ANSWER 11 OF 11 MEDLINE DUPLICATE 7  
ACCESSION NUMBER: 97411529 MEDLINE  
DOCUMENT NUMBER: 97411529 PubMed ID: 9333705  
TITLE: [Peritoneal instillation of taurolidine and  
heparin for preventing intraperitoneal tumor growth and  
trocar metastases in laparoscopic operations in the rat  
model].  
Peritoneale Instillation von Taurolidin und  
Heparin zur Verhinderung von intraperitonealem  
Tumorstadium und Trokarmetastasen bei laparoskopischen  
Operationen im Rattenmodell.  
AUTHOR: Jacobi C A; Sabat R; Ordemann J; Wenger F; Volk H  
D; Muller J M  
CORPORATE SOURCE: Chirurgische Klinik, Humboldt-Universitat, Berlin.  
SOURCE: LANGENBECKS ARCHIV FUR CHIRURGIE, (1997) 382 (4 Suppl 1)  
S31-6.  
Journal code: 0204167. ISSN: 0023-8236.  
PUB. COUNTRY: GERMANY: Germany, Federal Republic of  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: German  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199710  
ENTRY DATE: Entered STN: 19971024  
Last Updated on STN: 20000303  
Entered Medline: 19971015

AB BACKGROUND: Although port-site metastases occur after laparoscopic  
surgery, there is no generally accepted approach to prevent tumor  
implantation so far. METHODS: In order to prevent tumor metastases, the  
effect of taurolidine and heparin on the growth of colon  
adenocarcinoma DHD/K12/TRb was measured in vitro and in a rat model. After  
incubation of the cells with heparin, taurolidine or both  
substances, the cell kinetics were determined. In a second experiment,  
tumor cells were administered intraperitoneally in rats (n = 60) and  
pneumoperitoneum was established over 30 min. Rats were randomized into  
four groups (I: tumor cells; II: cells + heparin; III: cells +  
taurolidine; IV: cells + taurolidine + heparin).  
RESULTS: While tumor cell growth was not influenced by heparin in vitro,  
growth decreased significantly after incubation with taurolidine  
and taurolidine/heparin. In vivo, intraperitoneal tumor weight  
was lower in rats receiving heparin (298 +/- 155 mg) and  
taurolidine (149 +/- 247 mg) than in the control group (596 +/-  
278 mg). When the two substance were combined, tumor growth was even less  
(21.5 +/- 36 mg). Trocar metastases were only lower in rats receiving  
taurolidine or the combination of taurolidine and  
heparin. CONCLUSION: In vivo, heparin inhibits intraperitoneal tumor  
growth only slightly, while taurolidine causes a significant  
decrease in tumor cell growth in vitro as well as intraperitoneal tumor  
growth and trocar metastases in vivo.

L12 ANSWER 1 OF 45 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

ACCESSION NUMBER: 2003:67125 BIOSIS

DOCUMENT NUMBER: PREV200300067125

TITLE: Treatment of dentoalveolar infections with  
taurolidine and/or taurultam.

AUTHOR(S): Pfirrmann, Rolf Wilhelm (1); Geistlich, Peter

CORPORATE SOURCE: (1) Lucerne, Switzerland Switzerland

ASSIGNEE: Ed. Geistlich Soehne AG fuer Chemische Industrie,  
Wolhusen, Switzerland

PATENT INFORMATION: US 6488912 December 03, 2002

SOURCE: Official Gazette of the United States Patent and Trademark  
Office Patents, (Dec. 3 2002) Vol. 1265, No. 1, pp. No  
Pagination. <http://www.uspto.gov/web/menu/patdata.html>.  
e-file.

ISSN: 0098-1133.

DOCUMENT TYPE: Patent

LANGUAGE: English

AB A method of therapeutic treatment of an area of severe infection of soft  
tissue within or surrounding a tooth of a patient involves administering  
Taurolidine, Taurultam or mixtures thereof to the area  
of severe infection.

L12 ANSWER 2 OF 45 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

ACCESSION NUMBER: 2003:42641 BIOSIS

DOCUMENT NUMBER: PREV200300042641

TITLE: Methods and compositions for treating primary and secondary  
tumors of the central nervous system (CNS).

AUTHOR(S): Stendel, Ruediger (1); Pfirrmann, Rolf W.

CORPORATE SOURCE: (1) Berlin, Germany Germany

ASSIGNEE: Ed. Geistlich Soehne AG fur Chemische Industrie,  
Wolhusen, Switzerland

PATENT INFORMATION: US 6479481 November 12, 2002

SOURCE: Official Gazette of the United States Patent and Trademark  
Office Patents, (Nov. 12 2002) Vol. 1264, No. 2, pp. No  
Pagination. <http://www.uspto.gov/web/menu/patdata.html>.  
e-file.

ISSN: 0098-1133.

DOCUMENT TYPE: Patent

LANGUAGE: English

AB Methods and compositions for the treatment and/or prophylaxis and/or  
suppression of primary and/or secondary tumors of the central nervous  
system (brain and spinal cord, eyes) in mammalian subjects are disclosed,  
wherein an effective dose of a methylol transfer agent such as  
Taurolidine and/or Taurultam and/or a bioequivalent is  
administered to a mammalian subject suffering from, or at risk of growth  
of, tumors of the central nervous system. Furthermore, methods for local  
application of Taurolidine and/or Taurultam and/or a  
bioequivalent in solution are disclosed using microdialysis methods,  
irrigation methods, implantation methods and angiographic methods.

L12 ANSWER 3 OF 45 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:522632 CAPLUS

DOCUMENT NUMBER: 137:57552

TITLE: Use of taurolidine and/or taurultam  
for treatment of abdominal cancer and/or for the  
prevention of metastases

INVENTOR(S): Redmond, H. Paul; Pfirrmann, Rolf W.

PATENT ASSIGNEE(S): Ire.

SOURCE: U.S. Pat. Appl. Publ., 6 pp., Cont.-in-part of Ser.  
No. 493,797.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002091123	A1	20020711	US 2001-971774	20011009
WO 9906114	A2	19990211	WO 1998-GB2311	19980731
WO 9906114	A3	19990408		
W: CA, JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 1001781	A2	20000524	EP 1998-937635	19980731
R: AT, DE, ES, FR, GB, IT, NL				
JP 2001511463	T2	20010814	JP 2000-504921	19980731
PRIORITY APPLN. INFO.:			WO 1998-GB2311	W 19980731
			US 2000-493797	A2 20000128



US 2000-239916P P 20001013  
US 2000-246100P P 20001107  
US 2000-253138P P 20001128  
GB 1997-16219 A 19970731

AB **Taurolidine** and/or **taurultam** is administered during and after surgical removal of a cancerous tumor to treat abdominal cancer. **Taurolidine** inhibited the growth of a rat metastatic colorectal tumor cell line in vitro and in vivo.

L12 ANSWER 4 OF 45 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:406928 CAPLUS  
DOCUMENT NUMBER: 136:363829  
TITLE: Combination of fluorouracil and a methylol transfer agent for the treatment of tumor metastases and cancer  
INVENTOR(S): Redmond, Paul H.; Pfirrmann, Rolf W.  
PATENT ASSIGNEE(S): Ed Geistlich Soehne Ag Fuer Chemische Industrie, Switz.  
SOURCE: Eur. Pat. Appl., 4 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1208840	A2	20020529	EP 2001-309983	20011128
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 2002111328	A1	20020815	US 2001-993896	20011127
JP 2002326936	A2	20021115	JP 2001-361167	20011127

PRIORITY APPLN. INFO.: US 2000-253138P P 20001128  
AB Tumor growth and metastases in cancer patients are inhibited by administration of a combination therapy including effective amts. of 5-FU and a methylol transfer agent such as **taurolidine**, **taurultam** or mixts. thereof.

L12 ANSWER 5 OF 45 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:330202 CAPLUS  
DOCUMENT NUMBER: 136:335222  
TITLE: Treatment of tumor metastases and cancer with interleukin 2 and methylol transfer agent  
INVENTOR(S): Redmond, H. Paul; Pfirrmann, Rolf W.  
PATENT ASSIGNEE(S): Ed Geistlich Soehne A.-G. fuer Chemische Industrie, Switz.  
SOURCE: Eur. Pat. Appl., 5 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1201247	A2	20020502	EP 2001-309157	20011029
EP 1201247	A3	20020918		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 2002098164	A1	20020725	US 2001-983279	20011023
JP 2002332241	A2	20021122	JP 2001-329222	20011026

PRIORITY APPLN. INFO.: US 2000-243409P P 20001027  
AB Tumor metastases in cancer patients are inhibited by administration of a combination therapy including effective amts. of Interleukin-2 and a methylol transfer agent such as **taurolidine**, **taurultam** or mixts. thereof.

L12 ANSWER 6 OF 45 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:524655 CAPLUS  
DOCUMENT NUMBER: 135:87183  
TITLE: Methylol transfer agent for the treatment of inflammatory bowel disease  
INVENTOR(S): Redmond, H. Paul; Pfirrmann, Rolf W.  
PATENT ASSIGNEE(S): Ed. Geistlich Sohne A.-G. Fur Chemische Industrie, Switz.  
SOURCE: Eur. Pat. Appl., 6 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1116488	A2	20010718	EP 2001-300093	20010105
EP 1116488	A3	20020515		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 2002004502	A1	20020110	US 2001-753679	20010104
JP 2001226291	A2	20010821	JP 2001-739	20010105
PRIORITY APPLN. INFO.:			US 2000-174608P	P 20000105

AB Patients suffering from inflammatory bowel disease, e.g. Crohn's disease or ulcerative colitis, are treated either orally or i.v. with methylol transfer agents, such as **taurolidine** and/or **taurultam**. These agents can be used in combination with other drugs, thereby allowing the use of smaller amts. of other drugs and limiting unwanted side effects.

L12 ANSWER 7 OF 45 CAPLUS COPYRIGHT 2003 ACS  
 ACCESSION NUMBER: 2001:524654 CAPLUS  
 DOCUMENT NUMBER: 135:87181  
 TITLE: Methylol transfer agent for reduction of postoperative complications of cardiopulmonary bypass surgery  
 INVENTOR(S): Redmond, H. Paul; Pfirrmann, Rolf W.  
 PATENT ASSIGNEE(S): Ed. Geistlich Sohne A.-G. Fur Chemische Industrie, Switz.  
 SOURCE: Eur. Pat. Appl., 7 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1116487	A2	20010718	EP 2001-300092	20010105
EP 1116487	A3	20020417		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 2002035996	A1	20020328	US 2001-753719	20010104
JP 2001247480	A2	20010911	JP 2001-740	20010105
PRIORITY APPLN. INFO.:			US 2000-174606P	P 20000105
			US 2000-245235P	P 20001103

AB The invention provides a method of reducing postoperative complications of cardiopulmonary bypass (CPB) surgery in which an effective amt. of a methylol transfer agent, e.g. **taurolidine**, is administered to a patient in conjunction with CPB surgery. Patients undergoing crystalloid cardioplegia who were treated with **taurolidine** showed reduced levels of IL-6 and increased levels of IL-10 when compared to crystalloid patients administered a placebo. Soln. formulations are included.

L12 ANSWER 8 OF 45 CAPLUS COPYRIGHT 2003 ACS  
 ACCESSION NUMBER: 2001:28569 CAPLUS  
 DOCUMENT NUMBER: 134:105843  
 TITLE: Methylol transfer agents **taurolidine** and **taurultam** for treating primary and secondary tumors of the central nervous system (CNS)  
 INVENTOR(S): Stendel, Rudiger; Pfirrmann, Rolf Wilhelm  
 PATENT ASSIGNEE(S): Ed. Geistlich Sohne A.-G. fuer Chemische Industrie, Switz.  
 SOURCE: Eur. Pat. Appl., 10 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1066830	A2	20010110	EP 2000-304737	20000605
EP 1066830	A3	20021016		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6479481	B1	20021112	US 2000-583902	20000601
CA 2310534	AA	20001204	CA 2000-2310534	20000602
JP 2001010976	A2	20010116	JP 2000-168053	20000605
PRIORITY APPLN. INFO.:			US 1999-137421P	P 19990604
			US 1999-151050P	P 19990827
			US 1999-167681P	P 19991129
			US 2000-174607P	P 20000105
			US 2000-182200P	P 20000214

AB Methods and compns. for the treatment, prophylaxis, and/or suppression of primary and/or secondary tumors of the CNS (brain and spinal cord, eyes) in mammalian subjects using a methylol agent are described. An ED of a methylol transfer agent, such as taurolidine and/or taurultam and/or a bioequivalent, is administered to a mammalian subject suffering from, or at risk of growth of, tumors of the central nervous system. Furthermore, methods for local application of taurolidine and/or taurultam and/or a bioequivalent in soln. are disclosed using microdialysis methods, irrigation methods, implantation methods and angiog. methods. The soln. for delivery to a patient should contain an effective dosage of taurolidine and/or taurultam and/or taurultam-glucose, e.g., in the tissue-culture of glioblastoma multiform-tumor cells, as little as 0.1-4 mg/mL taurolidine inhibits or kills tumor cells. Taurultam so far has been shown to be almost twice as effective as taurolidine, the explanation of which may be found in the equil. of taurolidine in aq. soln. between methylol-taurultam and taurultam. Taurultam-glucose, on the other hand, has to be dosaged about twice as high as taurultam, as the mol. wt. from taurultam increases from 136 to 298. When administered to patients utilizing the irrigation/catheter method, a concn. of at least about 4 mg/mL taurolidine, taurultam or taurultam-glucose, resp., should be utilized.

L12 ANSWER 9 OF 45 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE  
1

ACCESSION NUMBER: 2000:320820 BIOSIS  
DOCUMENT NUMBER: PREV200000320820  
TITLE: Method of treating symptoms of microbial infection or sepsis.  
AUTHOR(S): Pfirrmann, Rolf W. (1)  
CORPORATE SOURCE: (1) Lucerne Switzerland  
ASSIGNEE: Ed. Geistlich Sohne AG fur Chemische Industrie, Switzerland  
PATENT INFORMATION: US 6011030 January 04, 2000  
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (Jan. 4, 2000) Vol. 1230, No. 1, pp. No pagination. e-file.  
ISSN: 0098-1133.  
DOCUMENT TYPE: Patent  
LANGUAGE: English

AB In accordance with the present invention, a method of treating a patient with symptoms of microbial infection and/or sepsis involves first administering to the patient an antimicrobial amount of a cell wall constituent-inactivating, endotoxin non-releasing, and/or exotoxin-inactivating antimicrobial compound such as Taurolidine and/or Taurultam, without administration of an antibiotic to the patient and prior to administration of such antibiotic. The Taurolidine and/or Taurultam are administered locally or intravenously to the patient to substantially inactivate microbes that are causing the infection. Only after substantially inactivating the microbes causing the infection with the Taurolidine and/or Taurultam, is an antibiotic administered to the patient.

L12 ANSWER 10 OF 45 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:190931 CAPLUS  
DOCUMENT NUMBER: 132:231932  
TITLE: Taurolidine and/or taurultam against infectious ulcer or gastritis  
INVENTOR(S): Pfirrmann, Rolf  
PATENT ASSIGNEE(S): Ed Geistlich Sohne A.-G. fur Chemische Industrie, Switz.; Pett, Christopher  
SOURCE: PCT Int. Appl., 26 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000015232	A1	20000323	WO 1999-GB3030	19990913
W: CA, JP, RU				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 6117868	A	20000912	US 1999-316115	19990520
CA 2344308	AA	20000323	CA 1999-2344308	19990913
EP 1112074	A1	20010704	EP 1999-946325	19990913
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

JP 2002525266 T2 20020813 JP 2000-569816 19990913  
PRIORITY APPLN. INFO.: US 1998-154451 A 19980916  
US 1999-316115 A 19990520  
WO 1999-GB3030 W 19990913

AB A method for the treatment of infectious gastrointestinal ulcer disease or infectious gastritis disease of microbially infected gastrointestinal tissue in a mammal involves administration of an antimicrobial amt. of an antimicrobial medicament which is cell wall constituent-inactivating by chem. reaction with cell wall constituents, endotoxin non-releasing, exotoxin-inactivating, or a combination thereof.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 11 OF 45 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:636211 CAPLUS  
DOCUMENT NUMBER: 133:227813  
TITLE: Treatment of gastrointestinal ulcers or gastritis caused by microbial infection  
INVENTOR(S): Pfirrmann, Rolf W.  
PATENT ASSIGNEE(S): Ed. Geistlich Sohne Ag Fur Chemische Industrie, Switz.  
SOURCE: U.S., 5 pp., Cont.-in-part of U.S. Ser. No. 154,451, abandoned  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6117868	A	20000912	US 1999-316115	19990520
CA 2344308	AA	20000323	CA 1999-2344308	19990913
WO 2000015232	A1	20000323	WO 1999-GB3030	19990913
W: CA, JP, RU				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 1112074	A1	20010704	EP 1999-946325	19990913
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

JP 2002525266 T2 20020813 JP 2000-569816 19990913  
PRIORITY APPLN. INFO.: US 1998-154451 B2 19980916  
US 1999-316115 A 19990520  
WO 1999-GB3030 W 19990913

AB A method and compn. for the treatment of infectious gastrointestinal ulcer disease or infectious gastritis disease of microbially infected gastrointestinal tissue in a mammal, involves administration of an antimicrobial amt. of an antimicrobial medicament which is cell wall constituent-inactivating by chem. reaction with cell wall constituents, endotoxin non-releasing, exotoxin-inactivating or a combination thereof. For example, a tablet for the treatment of gastrointestinal ulcers, contained taurolidine 300, Emdex 135, starch 135, aluminum hydroxide magnesium carbonate FMA-11 75, talc 24, Mg stearate 4.5, and Aerosil-200 1.5 mg.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 12 OF 45 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:705045 CAPLUS  
DOCUMENT NUMBER: 133:271703  
TITLE: Anticoagulant/sterilizing compositions and methods  
INVENTOR(S): Pfirrmann, Rolf W.  
PATENT ASSIGNEE(S): Ed Geistlich Sohne A.-G. fur Chemische Industrie, Switz.  
SOURCE: Eur. Pat. Appl., 11 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1040841	A1	20001004	EP 2000-302600	20000329
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
CA 2302720	AA	20000929	CA 2000-2302720	20000328
JP 2000300661	A2	20001031	JP 2000-91771	20000329

PRIORITY APPLN. INFO.: US 1999-126940P P 19990329  
US 2000-527558 A 20000316

AB Compns. and methods are provided for preventing formation of thrombosis

and/or bacterial growth on a liq.-contacting surface of a liq. delivery system, such as a port, catheter or port-catheter system. The liq. delivery system is connected to a patient for delivery of a liq. to the patient. The method involves contacting the surface with a thrombosis-preventing liq. contg. **taurolidine**, **taurultam** or a mixt. thereof, the thrombosis-preventing liq. further contg. an anticoagulant agent. In an alternative embodiment, the liq.-contacting surface of the delivery system is contacted with a soln. contg. an anticoagulant agent, and thereafter contacted with a soln. contg. **taurolidine**, **taurultam** or a mixt. thereof. A 2% **taurolidine** soln. was prepd. contg. citrate.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 13 OF 45 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:451194 CAPLUS  
DOCUMENT NUMBER: 131:68124  
TITLE: Use of antimicrobial agent such as **taurolidine** or **taurultam** in the manufacture of a medicament to treat a nosocomial microbial infection  
INVENTOR(S): Pffirmann, Rolf  
PATENT ASSIGNEE(S): Ed Geistlich Sohne A.-G. fur Chemische Industrie, Switz.; Pett, Christopher  
SOURCE: PCT Int. Appl., 30 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9934805	A1	19990715	WO 1999-GB28	19990106
W: AU, CA, CN, JP, KR, RU RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5972933	A	19991026	US 1998-4063	19980108
CA 2317748	AA	19990715	CA 1999-2317748	19990106
AU 9918844	A1	19990726	AU 1999-18844	19990106
EP 1044006	A1	20001018	EP 1999-900217	19990106
R: DE, ES, FR, GB, IT				
JP 2002500189	T2	20020108	JP 2000-527254	19990106
PRIORITY APPLN. INFO.: US 1998-4063 A 19980108 WO 1999-GB28 W 19990106				

AB The invention provides a method and compn. for treatment of a nosocomial, microbial infection of a patient which comprises introduction into the gut of a patient an antimicrobial amt. of an antimicrobial medicament which is cell wall constituent-inactivating, endotoxin non-releasing, exotoxin-inactivating, or a combination thereof. In particular, the invention provides the use of **taurolidine** and/or **taurultam** in the treatment of multi-resistant infections, e.g. vancomycin-resistant *Enterococcus faecalis* and methicillin-resistant *Staphylococcus aureus*.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 14 OF 45 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:161689 CAPLUS  
DOCUMENT NUMBER: 130:216166  
TITLE: Two new compounds by reaction of **taurolidine** with methylene glycol  
AUTHOR(S): Kennedy, Alan R.; Skellern, Graham G.; Pffirmann, Rolf W.; Smail, Gordon A.; Shankland, Norman; Florence, Alastair J.  
CORPORATE SOURCE: Department of Pure and Applied Chemistry, University of Strathclyde, Glasgow, G1 1XL, UK  
SOURCE: Acta Crystallographica, Section C: Crystal Structure Communications (1999), C55(2), 232-234  
CODEN: ACSCEE; ISSN: 0108-2701  
PUBLISHER: Munksgaard International Publishers Ltd.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB The compds. 7-oxa-2-[.lambda.]6-thia-1,5-diazabicyclo[3.3.1]nonane-2,2-dione (CSH10N2O3S) and 7-{[2-(2,2-dioxo-2[.lambda.]6-thia-1,5,7-triazabicyclo[3.3.1]non-7-yl)ethyl]sulfonyl}-2[.lambda.]6-thia-1,5,7-triazabicyclo[3.3.1]nonane-2,2-dione (C12H24N6O6S3) are produced when **taurolidine** is reacted with an excess of methylene glycol. The satd. six-membered heterocyclic rings in both compds. adopt distorted chair conformations. Crystallog. data are given.

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 15 OF 45 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1997:549358 CAPLUS  
DOCUMENT NUMBER: 127:152975  
TITLE: Pharmaceutical compositions comprising polyvinylpyrrolidone having an average molecular weight in the range of 3.000 to 14.000 daltons  
INVENTOR(S): Pfirrmann, Rolf  
PATENT ASSIGNEE(S): Ed Geistlich Sohne A.-G Fur Chemische Industrie, Switz.; Pett, Christopher; Pfirrmann, Rolf  
SOURCE: PCT Int. Appl., 18 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9725052	A2	19970717	WO 1997-GB69	19970109
WO 9725052	A3	19971218		
W: CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2242618	AA	19970717	CA 1997-2242618	19970109
EP 873130	A2	19981028	EP 1997-900318	19970109
R: DE, ES, FR, GB, IT				
JP 2000516196	T2	20001205	JP 1997-524995	19970109
US 6080397	A	20000627	US 1998-91228	19980904
PRIORITY APPLN. INFO.:				
			GB 1996-426	A 19960110
			WO 1997-GB69	W 19970109

AB Pharmaceutical compns. for use in medicine, e.g. as infusion or surgical rinse solns., and processes for their prepn. are disclosed. The compns. of the invention comprise an aq. soln. of physiol. inert PVP having a wt. av. mol. wt. in the range of from 3.000 to 14.000 daltons. PVP was purified with Dowex MSC-1 and passed through Gambro-7000 ultrafilter to obtain PVP having av. mol. wt. in the range of 7000-9000. A slow i.v. drop infusion contained above PVP 30, sodium chloride 4.5, and water for injection q.s. 500 mL, pH =7.3.

L12 ANSWER 16 OF 45 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1994:183009 CAPLUS  
DOCUMENT NUMBER: 120:183009  
TITLE: Treatment of dentoalveolar infections with taurolidine and/or taurultam  
INVENTOR(S): Pfirrmann, Rolf Wilhelm; Geistlich, Peter  
PATENT ASSIGNEE(S): Holmes, Michael John, UK; Ed Geistlich Soehne AG fuer Chemische Industrie  
SOURCE: PCT Int. Appl., 29 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9403174	A1	19940217	WO 1993-GB1607	19930729
W: CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 652753	A1	19950517	EP 1993-917947	19930729
R: AT, BE, DE, ES, FR, GB, IT, NL				
JP 07509483	T2	19951019	JP 1993-505094	19930729
US 6488912	B1	20021203	US 1999-345744	19990701
PRIORITY APPLN. INFO.:				
			GB 1992-16155	A 19920730
			WO 1993-GB1607	W 19930729
			US 1995-374722	B1 19950215
			US 1996-770127	B1 19961219

AB The present invention provides a new means of combating severe dentoalveolar infections such as dental gangrene, parodontitis and abscesses which involves the administration of the methylol-transfer agents taurolidine and/or taurultam. In one embodiment the taurolidine and/or taurultam compns. may be administered prophylactically to combat post-operative infection. Certain novel compns. comprising taurolidine and or taurultam are also described. Patients with alveolitis sicca dolorosa, gangrene, parodontitis marginalis, pericoronitis, abscess, and infection were treated with taurolidine in an irrigation fluid, in a liq. gel, and in a dental emulsion, all at 3%. Taurolidine was superior to the std. therapy for all 6 indications.

2

ACCESSION NUMBER: 1994:106127 BIOSIS  
 DOCUMENT NUMBER: PREV199497119127  
 TITLE: Studies of the thiadizine **taurolidine-I**.  
 Identification of the molecular species present in aqueous  
 solutions by <sup>1</sup>H- and <sup>13</sup>C-NMR spectroscopy.  
 AUTHOR(S): Hood, H. T.; Smail, G. A.; Skellern, G. G. (1); Jindal, D.  
 P.; Browse, M. K.; **Pfarrmann, R. W.**  
 CORPORATE SOURCE: (1) Dep. Pharm. Sci., Univ. Strathclyde, Glasgow G1 1XW UK  
 SOURCE: Talanta, (1994) Vol. 41, No. 1, pp. 107-113.  
 ISSN: 0039-9140.  
 DOCUMENT TYPE: Article  
 LANGUAGE: English

## L12 ANSWER 18 OF 45 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1992:253016 CAPLUS  
 DOCUMENT NUMBER: 116:253016  
 TITLE: Compositions containing hydroxyethyl starch for  
 preserving and storing organs intended for  
 transplantation  
 INVENTOR(S): **Pfarrmann, Rolf Wilhelm**  
 PATENT ASSIGNEE(S): Ed Geistlich Soehne AG fuer Chemische Industrie,  
 Switz.; Holmes, Michael John  
 SOURCE: PCT Int. Appl., 12 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9205693	A1	19920416	WO 1991-EP1885	19910927
W: CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
CA 2093116	AA	19920402	CA 1991-2093116	19910927
EP 551359	A1	19930721	EP 1991-917590	19910927
EP 551359	B1	19940810		
R: DE, FR, GB, IT				

PRIORITY APPLN. INFO.: GB 1990-21325 19901001  
 WO 1991-EP1885 19910927

AB An aq. compn. for preservation and storage of an organ intended for  
 transplantation contains physiol. inert hydroxyethyl starch (I) of mean  
 mol. wt. <100,000 Da (preferably 30,000-70,000 Da). The itching reaction  
 assocd. with compns. contg. high-mol.-wt. I (150,000-350,000 Da) is avoided  
 with the lower mol.-wt. I. Lung transplant studies in pigs showed that  
 solns. contg. I of 150,000-350,000 Da led to edema and death of the  
 animals in approx. 1 day; when the soln. of the invention was used, all  
 the pigs survived. When solns. of the invention contg. 0.5 and 1.0%  
 (wt./wt.) **taurultam** were infused into dissected ischemic rat  
 livers, a marked influence of the higher concn. of **taurultam** on  
 inhibition of a rapid increase in alanine aminotransferase, aspartate  
 aminotransferase, and glutamate dehydrogenase was shown, demonstrating  
 greater inhibition of tissue degradn.

## L12 ANSWER 19 OF 45 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1991:623460 CAPLUS  
 DOCUMENT NUMBER: 115:223460  
 TITLE: **Taurolidine** and **taurultam** for  
 decreasing side effects of tumor necrosis factor  
 INVENTOR(S): **Pfarrmann, Rolf Wilhelm**; Geistlich, Peter  
 PATENT ASSIGNEE(S): Holmes, Michael John, UK; Geistlich, Ed., Soehne A.-G.  
 fuer Chemische Industrie  
 SOURCE: PCT Int. Appl., 15 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9113628	A1	19910919	WO 1991-EP524	19910315
W: CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
CA 2078221	AA	19910916	CA 1991-2078221	19910315
EP 520021	A1	19921230	EP 1991-906832	19910315
EP 520021	B1	19951206		

R: DE, ES, FR, GB, IT  
 JP 05505615 T2 19930819 JP 1991-506781 19910315  
 ES 2080307 T3 19960201 ES 1991-906832 19910315  
 US 5593665 A 19970114 US 1994-243739 19940517  
 PRIORITY APPLN. INFO.: GB 1990-5856 19900315  
 WO 1991-EP524 19910315  
 US 1991-778988 19911114  
 US 1993-46933 19930413

AB Tumors and other conditions mediated by tumor necrosis factor (TNF) are treated by simultaneous, sep., or sequential administration of TNF and taurolidine and/or taurultam. Taurolidine and taurultam are effective in reducing the toxicity and side effects of TNF. An injection soln. contained taurolidine 400, PVP 1000g, and sterile water to 20 L.

L12 ANSWER 20 OF 45 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1991:12248 CAPLUS  
 DOCUMENT NUMBER: 114:12248  
 TITLE: Lyophilized collagen sponges containing taurolidine and/or taurultam as implant for use in bone surgery  
 INVENTOR(S): Pfirrmann, Rolf Wilhelm  
 PATENT ASSIGNEE(S): Holmes, Michael John, UK; Geistlich, Ed., Soehne A.-G. fuer Chemische Industrie  
 SOURCE: PCT Int. Appl., 12 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9006138	A1	19900614	WO 1989-GB1423	19891128
W: CH, DE, GB, JP, NL, US				
RW: AT, BE, CH, DE, ES, FR, GB, IT, LU, NL, SE				
EP 446262	A1	19910918	EP 1990-900227	19891128
EP 446262	B1	19940316		
R: DE, ES, FR, GB, IT				
JP 04502414	T2	19920507	JP 1990-500253	19891128
ES 2063333	T3	19950101	ES 1990-900227	19891128
JP 2873082	B2	19990324	JP 1989-500253	19891128
PRIORITY APPLN. INFO.: GB 1988-27986 19881130				
WO 1989-GB1423 19891128				

AB A lyophilized collagen sponge for use as an implant in osteitis and bone surgery contains taurolidine and/or taurultam. Collagen GN was soaked with 4.8% taurolidine soln. and then freeze-dried to give a taurolidine-collagen sponge with 20 mg taurolidine/cm<sup>2</sup>.

L12 ANSWER 21 OF 45 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1990:538563 CAPLUS  
 DOCUMENT NUMBER: 113:138563  
 TITLE: Purified particulate bone mineral for prosthetic bone replacement  
 INVENTOR(S): Pfirrmann, Rolf Wilhelm  
 PATENT ASSIGNEE(S): Geistlich, Ed, Sohne A.-G. fuer Chemische Industrie, Switz.; Holmes, Michael John  
 SOURCE: PCT Int. Appl., 16 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9001955	A1	19900308	WO 1989-GB1020	19890816
W: CH, DE, GB, JP, US				
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
JP 04501070	T2	19920227	JP 1989-509992	19890816
EP 489728	A1	19920617	EP 1989-910649	19890816
EP 489728	B1	19970129		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
AT 148350	E	19970215	AT 1989-910649	19890816
CA 1336402	A1	19950725	CA 1989-608699	19890818
US 5573771	A	19961112	US 1995-391247	19950221
PRIORITY APPLN. INFO.: GB 1988-19755 19880819				
WO 1989-GB1020 19890816				
US 1990-469609 19900619				



US 1992-876114 19920429  
US 1993-115792 19930903  
US 1994-258361 19940610

OTHER SOURCE(S): MARPAT 113:138563

AB A purified particulate bone mineral product comprises mineral particles free from all endogenous org. material and has resorbable, physiol. compatible, natural or synthetic macromol. material at the surface. The product is used as remodelling implants or prosthetic bone replacement. Aq. formaldehyde was added to 60.degree. gelatin soln. and deproteinated bovine femur cancellous bone pieces were added to the mixt. and vacuum applied and released for five times. The mixt. was left to stand at room temp. for 7 days and the bone pieces were then sepd. from the gel and dried in vacuum. The treated bone pieces were packed in polyethylene containers and sterilized by .gamma.-irradn. The ball pressure hardness and compressive strength was 5.1 and 4, compared to 2.5 and 0.8 N/mm2, resp. for the control without gelatin coating.

L12 ANSWER 22 OF 45 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1989:412513 CAPLUS

DOCUMENT NUMBER: 111:12513

TITLE: Pharmaceutical infusions containing  
taurolidine on taurultam and polyols

INVENTOR(S): Pfirrmann, Rolf Wilhelm

PATENT ASSIGNEE(S): Geistlich, Ed., Soehne A.-G. fuer Chemische Industrie,  
Switz.

SOURCE: Eur. Pat. Appl., 11 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 253662	A1	19880120	EP 1987-306297	19870716
EP 253662	B1	19901114		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
JP 63072626	A2	19880402	JP 1987-176091	19870716
JP 2550356	B2	19961106		
AT 58294	E	19901115	AT 1987-306297	19870716
CA 1287300	A1	19910806	CA 1987-542249	19870716
ES 2026184	T3	19920416	ES 1987-306297	19870716
AU 8775785	A1	19880121	AU 1987-75785	19870717
AU 604031	B2	19901206		
US 5210083	A	19930511	US 1991-672010	19910319

PRIORITY APPLN. INFO.:

GB 1986-17482	19860717
EP 1987-306297	19870716
US 1987-74875	19870717
US 1989-298857	19890119
US 1989-408425	19890914
US 1990-552359	19900712

AB Formulations contain taurolidine and/or taurultam, as bactericides, parenterally acceptable polyol in aq. soln. An aq. infusion (1000 mL) for the treatment of metabolic acidosis contained ACONA 8.2, NaHCO3 4.2, Na L-malate 6.2, trometamol 4.0, sorbitol 50.0, and taurolidine 30.0 g.

L12 ANSWER 23 OF 45 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1986:485206 CAPLUS

DOCUMENT NUMBER: 105:85206

TITLE: Taurolidine in preoperative  
colon-disinfection

INVENTOR(S): Pfirrmann, Rolf Wilhelm

PATENT ASSIGNEE(S): Holmes, Michael John, UK; Geistlich, Ed., Soehne A.-G.  
fur Chemische Industrie

SOURCE: PCT Int. Appl., 13 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8602003	A1	19860410	WO 1985-GB444	19850927
W: GB, JP, US				
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
EP 203933	A1	19861210	EP 1985-904844	19850927
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				

PRIORITY APPLN. INFO.: GB 1984-24518 19840928

AB Preoperative colon disinfection is accomplished by an aq. and(or) solid compn. contg. an antibacterial and antitoxemic compd. I (R1 = H or Cl-5 alkyl; R2 = H, II), the preferred compd. is taurolidine. Thus, an oral soln. was prepd. contg. taurolidine 5.0 g, Povidone 18.75 g, saccharin, flavoring, and water to 250 mL.

L12 ANSWER 24 OF 45 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1985:606526 CAPLUS  
DOCUMENT NUMBER: 103:206526  
TITLE: **Taurolin: A New Concept for Antimicrobial Chemotherapy of Surgical Infections.** Papers Presented at the International **Taurolin** Symposium on October 22, 1983 in Munich in Revised and Expanded Form (**Taurolin: Ein Neues Konzept zur Antimikrobiellen Chemotherapie Chirurgischer Infektionen.** Anlaesslich des Internationalen **Taurolin**-Symposiums am 22. Oktober 1983 in Muenchen Gehaltenen Vortraege in Ueberarbeiteter und Erwe)  
AUTHOR(S): Brueckner, Walter L.; Pfirrmann, Rolf W.; Editors  
CORPORATE SOURCE: Fed. Rep. Ger.  
SOURCE: (1985) Publisher: (Urban and Schwarzenberg: Munich, Fed. Rep. Ger.), 350 pp.  
DOCUMENT TYPE: Book  
LANGUAGE: German  
AB Unavailable

L12 ANSWER 25 OF 45 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1987:43490 CAPLUS  
DOCUMENT NUMBER: 106:43490  
TITLE: Studies on the antiendotoxin properties of **taurolin** in animals and man  
AUTHOR(S): Browne, M. K.; Leslie, G.; Pfirrmann, R. W.; McCartney, Christine  
CORPORATE SOURCE: Dep. Surg., Monklunds District Gen. Hosp., Airdrie, UK  
SOURCE: Recent Adv. Chemother., Proc. Int. Congr. Chemother., 14th (1985), Issue Antimicrobial Sect. 3, 2075-6.  
Editor(s): Ishigami, Joji. Univ. Tokyo Press: Tokyo, Japan.  
CODEN: 55GNAX  
DOCUMENT TYPE: Conference  
LANGUAGE: English  
AB In mice and rabbits injected with lipopolysaccharide from *Escherichia coli* and crude endotoxin from *Bacteroides fragilis*, the lethal effect was abolished if **taurolin** (I) [19388-87-5] was given immediately before or after the toxin. When bacteria killed after incubation with antibiotics or I were injected into mice, only I prevented the lethal effects of bacterial endotoxin. From clin. data in human it is concluded that I has antiendotoxin properties.

L12 ANSWER 26 OF 45 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1986:28429 CAPLUS  
DOCUMENT NUMBER: 104:28429  
TITLE: Comparative study of the local ototoxicity from **taurolin** and other antibacterially active substances  
AUTHOR(S): Handrock, M.; Matthias, R.  
CORPORATE SOURCE: Hals Nasen-Ohrenklin., Freie Univ., Berlin, D-1000/45, Fed. Rep. Ger.  
SOURCE: **Taurolin** (1985), 120-30. Editor(s): Brueckner, Walter L.; Pfirrmann, Rolf W. Urban & Schwarzenberg: Munich, Fed. Rep. Ger.  
CODEN: 54MRAY  
DOCUMENT TYPE: Conference  
LANGUAGE: German  
AB The ototoxicity was tested of com. ear drop preps., their individual components, antiseptics, as well as polyvidone-iodine and **taurolidine(taurolin)** (I) after intratympanol administration in lab. animals. Constituents of ear drop preps. such as glycerol, propylene glycol, ethanol (70%), local anesthetics such as tetracaine or lidocaine, as well as merfen and Solutio Castellani were ototoxic after intratympanal infusion. No ototoxicity was obsd. with polyvidone-iodine, 3% boric acid [11113-50-1], or a gel contg. I. The administration of I to the middle ear regions seems esp. favorable since it does not appreciably stimulate or thicken middle ear mucosa.

L12 ANSWER 27 OF 45 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1985:605725 CAPLUS  
DOCUMENT NUMBER: 103:205725

TITLE: Peritoneal washing with **taurolin** in experimental peritonitis - studies on rats  
AUTHOR(S): Brinkkoetter, U.; Goertz, G.  
CORPORATE SOURCE: Abt. Allg., Freien Univ., Berlin, D-1000/45, Fed. Rep. Ger.  
SOURCE: **Taurolin** (1985), 100-5. Editor(s): **Brueckner, Walter L.; Pfirrmann, Rolf W. Urban & Schwarzenberg**: Munich, Fed. Rep. Ger.  
CODEN: 54MRAY  
DOCUMENT TYPE: Conference  
LANGUAGE: German  
AB In exptl. *Escherichia coli*-*Bacteroides fragilis* peritonitis in rats, a single peritoneal lavage with **taurolin** [19388-87-5] caused only a relatively small decrease in bacterial nos. In spite of this, the mortality was decreased markedly in comparison with controls or with animals lavaged with NaCl soln., perhaps due to a protracted and systemic action of **taurolin** or to an endotoxin-inhibiting effect. The bacterial count-reducing action of NaCl lavage was very small, but the lethality from the infection could be reduced by the use of large vols of NaCl soln.

L12 ANSWER 28 OF 45 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1985:610950 CAPLUS  
DOCUMENT NUMBER: 103:210950  
TITLE: **Taurolin**-bacteriology in vitro  
AUTHOR(S): Brodhage, H.; **Pfirrmann, R. W.**  
CORPORATE SOURCE: Meggen, CH-6045, Switz.  
SOURCE: **Taurolin** (1985), 38-47. Editor(s): **Brueckner, Walter L.; Pfirrmann, Rolf W. Urban & Schwarzenberg**: Munich, Fed. Rep. Ger.  
CODEN: 54MRAY  
DOCUMENT TYPE: Conference  
LANGUAGE: German

AB The in vitro activity of **taurolin**, a synthetic antimicrobial, was detd. against various species of bacteria, mycobacteria, and fungi. The antibacterial effect of **taurolin** was greatest at low pH (5) and was unaffected by serum. No significant resistance to **taurolin** developed after 25-30 subcultures of *Staphylococcus aureus* or *Escherichia coli*.

L12 ANSWER 29 OF 45 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1985:605594 CAPLUS  
DOCUMENT NUMBER: 103:205594  
TITLE: Pharmacology and toxicology of **taurolidine**  
AUTHOR(S): Waser, P. G.; Sibling, E.; Ganz, A. J.  
CORPORATE SOURCE: Pharmakol. Inst., Univ. Zurich, CH-8006, Switz.  
SOURCE: **Taurolin** (1985), 24-37. Editor(s): **Brueckner, Walter L.; Pfirrmann, Rolf W. Urban & Schwarzenberg**: Munich, Fed. Rep. Ger.  
CODEN: 54MRAY  
DOCUMENT TYPE: Conference  
LANGUAGE: German

AB Pharmacol. and toxicol. studies with **taurolidine** (I) [19388-87-5], demonstrated it to be an effective antibacterial substance with little toxicity and few side effects at therapeutic concns. in lab. animals. I was rapidly metabolized to CO<sub>2</sub> and taurinamide or endogenous taurine. I did not interact with biogenic amines and thus can be co-administered with dopamine [51-61-6] or dobutamine [34368-04-2] in the treatment of endotoxin or septic shock. I had no analgesic, anti-inflammatory, anticonvulsive, sedative effects, or toxic effects on the control nervous system.

L12 ANSWER 30 OF 45 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1985:605231 CAPLUS  
DOCUMENT NUMBER: 103:205231  
TITLE: **Taurolin**: a new concept for antimicrobial chemotherapy of surgical infections. Introduction and review  
AUTHOR(S): **Pfirrmann, R. W.**  
CORPORATE SOURCE: Lugern, CH-6006, Switz.  
SOURCE: **Taurolin** (1985), 3-23. Editor(s): **Brueckner, Walter L.; Pfirrmann, Rolf W. Urban & Schwarzenberg**: Munich, Fed. Rep. Ger.  
CODEN: 54MRAY  
DOCUMENT TYPE: Conference; General Review  
LANGUAGE: German

AB A review with 69 refs. on the bactericidal activity, action mechanism, mutagenicity, carcinogenicity, antitoxin effects, and pharmacokinetics of **taurolin** (I) [19388-87-5].

L12 ANSWER 31 OF 45 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1984:603948 CAPLUS  
DOCUMENT NUMBER: 101:203948  
TITLE: Comparison of povidone-iodine and **taurolin**  
in experimental peritonitis  
AUTHOR(S): Browne, M. K.; Leslie, G. B.; **Pfirmsmann, R. W.**  
CORPORATE SOURCE: Monklands Dist. Gen. Hosp., Airdrie, UK  
SOURCE: PVP-Jod Oper. Med. (1984), 170-6. Editor(s):  
Hierholzer, Guenther; Goertz, Guenter. Springer:  
Berlin, Fed. Rep. Ger.  
CODEN: 52ONAI  
DOCUMENT TYPE: Conference  
LANGUAGE: English  
AB In a mouse model of *Escherichia coli*-induced peritonitis, povidone-iodine (PVP-I) [25655-41-8] i.p. injection appeared to cause acute discomfort and resulted in 100% mortality, whereas injection of noxytiolin [15599-39-0] and **taurolin** [19388-87-5] exerted protection against the lethal effects of peritonitis. At autopsy, no continuing peritonitis was obsd.; however, mice injected with PVP-I had staining of the bowel and peritoneum and signs of acute inflammation and necrosis. The use of PVP-I in the peritoneal cavity is not recommended.

L12 ANSWER 32 OF 45 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

ACCESSION NUMBER: 1984:84935 BIOSIS  
DOCUMENT NUMBER: BR27:1427  
TITLE: SOLUTION FOR SURGICAL LAVAGE.  
AUTHOR(S): WICKI O; **PFIRRMANN R W**  
CORPORATE SOURCE: CHIRURGISCHE ABTEILUNG, KANTONALES SPITAL, CH-6110  
SOURCE: 100TH MEETING OF THE DEUTSCHE GESELLSCHAFT FUER CHIRURGIE (GERMAN SOCIETY FOR SURGERY), APR. 6-9, 1983. LANGENBECKS ARCH CHIR, (1983) 361 (0), 778.  
CODEN: LAACBS. ISSN: 0023-8236.  
DOCUMENT TYPE: Conference  
FILE SEGMENT: BR; OLD  
LANGUAGE: English; German

L12 ANSWER 33 OF 45 MEDLINE DUPLICATE 3

ACCESSION NUMBER: 83268102 MEDLINE  
DOCUMENT NUMBER: 83268102 PubMed ID: 6875837  
TITLE: NMR studies and GC analysis of the antibacterial agent **taurolidine**.  
AUTHOR: Knight B I; Skellern G G; Smail G A; Browne M K; **Pfirmsmann R W**  
SOURCE: JOURNAL OF PHARMACEUTICAL SCIENCES, (1983 Jun) 72 (6) 705-7.  
Journal code: 2985195R. ISSN: 0022-3549.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 198309  
ENTRY DATE: Entered STN: 19900319  
Last Updated on STN: 19900319  
Entered Medline: 19830923

AB The NMR spectrum of **taurolidine** in deuterium oxide was compared with spectra obtained from model experiments with amines and formaldehyde. Head-space analysis combined with capillary GC showed that there was less than 0.004% free formaldehyde present in 2% solutions of **taurolidine**. This value is comparable to the concentration of formaldehyde found when the **taurolidine** solutions were injected directly onto GC columns.

L12 ANSWER 34 OF 45 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. DUPLICATE 4

ACCESSION NUMBER: 1984:176845 BIOSIS  
DOCUMENT NUMBER: BA77:9829  
TITLE: STRUCTURAL INVESTIGATION OF A NEW ORGANIC ANTISEPTIC **TAUROLIDINE** ANALYTICAL STUDY AND APPLICATION TO IDENTIFICATION AND QUANTITATION IN BIOLOGICAL FLUIDS.  
AUTHOR(S): ERB F; IMBENOTTE M; HUVENNE J P; VANKEEMMEL M; SCHERPEREEL P; **PFIRRMANN R W**  
CORPORATE SOURCE: LAB. TOXICOL.-3 RUE PROFESSEUR LAGUESSE-59045 LILLE CEDEX-FR.  
SOURCE: EUR J DRUG METAB PHARMACOKINET, (1983) 8 (2), 163-174.  
CODEN: EJDPD2. ISSN: 0398-7639.  
FILE SEGMENT: BA; OLD  
LANGUAGE: English

AB In order to aid clinical investigations of metabolism and to study the antiseptic action of **Taurolin** [a bactericidal compound],

analysis of **Taurolidine** solutions by gas chromatography [GC] coupled with mass spectrometry and Fourier Transform IR spectrometry was performed. The active species is methylol-Taurultam, which was observed as N-amino methyl N-methylol taurine, after ring opening due to high temperatures used in GC analysis. To minimize such uncontrolled thermal decompositions during biological fluid analysis, high performance liquid chromatography was used. Clinical results obtained by this method in human patients are presented.

L12 ANSWER 35 OF 45 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1982:223317 CAPLUS  
DOCUMENT NUMBER: 96:223317  
TITLE: Treatment of osteitis  
INVENTOR(S): Pfirrmann, Rolf Wilhelm  
PATENT ASSIGNEE(S): Geistlich, Ed., Soehne A.-G. fuer Chemische Industrie, Switz.  
SOURCE: Eur. Pat. Appl., 22 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 48558	A2	19820331	EP 1981-304017	19810902
EP 48558	A3	19820512		
EP 48558	B1	19870624		
R: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
CA 1190855	A1	19850723	CA 1981-384918	19810831
FI 8102709	A	19820304	FI 1981-2709	19810902
DK 8103883	A	19820304	DK 1981-3883	19810902
DK 159808	B	19901210		
DK 159808	C	19910506		
AU 8174861	A1	19820311	AU 1981-74861	19810902
AU 554672	B2	19860828		
JP 57077616	A2	19820515	JP 1981-137099	19810902
JP 04068283	B4	19921102		
ZA 8106091	A	19821027	ZA 1981-6091	19810902
ES 505132	A1	19830416	ES 1981-505132	19810902
IL 63712	A1	19851031	IL 1981-63712	19810902
AT 27916	E	19870715	AT 1981-304017	19810902
US 4587268	A	19860506	US 1984-587707	19840308
PRIORITY APPLN. INFO.:			GB 1980-28482	19800903
			EP 1981-304017	19810902
			US 1981-298889	19810902

AB An aq. resorbable gel is used for healing an infection in a cavity in bone or other tissues. The gel, the aq. phase of which contains a H<sub>2</sub>O-sol. medicament, is relatively rapidly resorbed in 10-14 days, the active substance being released primarily by the resorption process rather than by diffusion of the substance. The gel may be a water sol. fibrous protein such as hydrolyzed collagens and contains gelatin which ensures flexibility. Edible gelatin 125 g was dispersed in 1% aq. taurolidine 1250 mL and heated to 60.degree.. Aq. HCHO was added to the mixt. and then poured into PVC tubes. The tubes were cooled and cut into 15 cm lengths. The transparent rods thus obtained were washed in a 1% taurolidine soln. to remove excess HCHO. These rods were granulated and sealed in a polyethylene foil envelope. The efficacy of the gel in healing wounds was demonstrated in exptl. induced osteomyelitis.

L12 ANSWER 36 OF 45 MEDLINE

ACCESSION NUMBER: 82046157 MEDLINE  
DOCUMENT NUMBER: 82046157 PubMed ID: 7295478  
TITLE: The characterisation and quantitation by high-performance liquid chromatography of the metabolites of taurolin.  
AUTHOR: Knight B I; Skellern G G; Browne M K; Pfirrmann R W  
SOURCE: BRITISH JOURNAL OF CLINICAL PHARMACOLOGY, (1981 Sep) 12 (3) 439-40.  
Journal code: 7503323. ISSN: 0306-5251.  
PUB. COUNTRY: ENGLAND: United Kingdom  
DOCUMENT TYPE: Letter  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 198201  
ENTRY DATE: Entered STN: 19900316  
Last Updated on STN: 19900316  
Entered Medline: 19820109

L12 ANSWER 37 OF 45 MEDLINE DUPLICATE 5  
 ACCESSION NUMBER: 82135189 MEDLINE  
 DOCUMENT NUMBER: 82135189 PubMed ID: 7332737  
 TITLE: Peritoneal absorption of the antibacterial and  
 antiendotoxin **taurolin** in peritonitis.  
 AUTHOR: Knight B I; Skellern G G; Browne M K; **Pfarrmann** R W  
 SOURCE: BRITISH JOURNAL OF CLINICAL PHARMACOLOGY, (1981 Nov) 12 (5)  
 695-9.  
 Journal code: 7503323. ISSN: 0306-5251.  
 PUB. COUNTRY: ENGLAND: United Kingdom  
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
 LANGUAGE: English  
 FILE SEGMENT: Priority Journals  
 ENTRY MONTH: 198205  
 ENTRY DATE: Entered STN: 19900317  
 Last Updated on STN: 19900317  
 Entered Medline: 19820512

AB 1 **Taurolin** metabolite plasma concentrations were measured in two  
 groups of patient undergoing abdominal surgery, one group with peritonitis  
 and the other without peritonitis, each group receiving **taurolin**  
 by intraperitoneal instillation. 2 There was no significant difference in  
 the area under the curves, for the two groups, for one of the metabolites.  
 This would suggest that the absorption of **taurolin** was not  
 modified in inflammatory conditions such as bacterial peritonitis.

L12 ANSWER 38 OF 45 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.DUPLICATE 6  
 ACCESSION NUMBER: 81200127 EMBASE  
 DOCUMENT NUMBER: 1981200127  
 TITLE: The characterisation and quantitation by high performance  
 liquid chromatography of the metabolites of  
**taurolin**.  
 AUTHOR: Knight B.I.; Skellern G.G.; Browne M.K.; **Pfarrmann**  
 R.W.  
 CORPORATE SOURCE: Drug Metab. Res. Unit, Dept. Pharmaceut. Chem., Univ.  
 Strathclyde, Glasgow G1 1XW, United Kingdom  
 SOURCE: British Journal of Clinical Pharmacology, (1981) 12/3  
 (439-440).  
 CODEN: BCPHBM  
 COUNTRY: United Kingdom  
 DOCUMENT TYPE: Journal  
 FILE SEGMENT: 037 Drug Literature Index  
 030 Pharmacology  
 029 Clinical Biochemistry  
 LANGUAGE: English

AB The overall derivatisation/extraction yield for taurineamide from plasma  
 was 74% and was independent of the taurineamide concentration up to 100  
 .mu.g ml<sup>-1</sup>. The overall yield for DPT varied from 19% at 5 .mu.g ml<sup>-1</sup> DPT  
 to 26% at 40 .mu.g ml<sup>-1</sup> DPT. Increasing the amount of dansyl chloride,  
 reaction time or the temperature, did not improve the recovery of DPT or  
 taurineamide. The precision (relative standard derivation) of the method  
 estimated from seven replicate analyses was 4.7% for DPT (14.9 .mu.g ml<sup>-1</sup>)  
 and 3.7% for taurineamide (50.6 .mu.g ml<sup>-1</sup>) in blank plasma. Although the  
 overall recovery of DPT is low the precision of the method indicates it is  
 reproducible.

L12 ANSWER 39 OF 45 CAPLUS COPYRIGHT 2003 ACS  
 ACCESSION NUMBER: 1981:71523 CAPLUS  
 DOCUMENT NUMBER: 94:71523  
 TITLE: Agent for hindering or diminishing adhesion formation  
 or for removing or dissolving existing adhesions in  
 body tissue  
 INVENTOR(S): **Pfarrmann, Rolf Wilhelm**  
 PATENT ASSIGNEE(S): Geistlich, Ed., Soehne A.-G. fuer Chemische Industrie,  
 Switz.  
 SOURCE: Ger. Offen., 11 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3017711	A1	19801120	DE 1980-3017711	19800508
US 4337251	A	19820629	US 1980-147231	19800506
BE 883151	A1	19800901	BE 1980-200501	19800507
AU 8058161	A1	19801113	AU 1980-58161	19800507
AU 519407	B2	19811203		
JP 55151513	A2	19801126	JP 1980-60011	19800508
FR 2455890	A1	19801205	FR 1980-10288	19800508

FR 2455890	B1	19870123		
GB 2052257	A	19810128	GB 1980-15223	19800508
CA 1156146	A1	19831101	CA 1980-351660	19800509
PRIORITY APPLN. INFO.:			GB 1979-16017	19790509

AB A liq. prepn. for preventing or removing adhesions following surgery contains approx. 1-2% by wt. taurolin (I) [19388-87-5] and 4-7% by wt. poly(vinylpyrrolidinone) (PVP) with a mol. wt. of 2000-3500 in a pH 6 aq. soln. The soln. is administered so as to flow freely over the affected tissue at a rate of 2-20 g I/24 h. Thus, 400 g I, and 1 kg PVP were dissolved in 15 L sterile H2O at 50.degree., cooled, adjusted to pH 6, sterilized by filtration, and sealed in ampuls.

L12 ANSWER 40 OF 45 MEDLINE DUPLICATE 7  
 ACCESSION NUMBER: 79172817 MEDLINE  
 DOCUMENT NUMBER: 79172817 PubMed ID: 374333  
 TITLE: The anti-endotoxin activity of Taurolin in experimental animals.  
 AUTHOR: Pfirrmann R W; Leslie G B  
 SOURCE: JOURNAL OF APPLIED BACTERIOLOGY, (1979 Feb) 46 (1) 97-102.  
 Journal code: 7503050. ISSN: 0021-8847.  
 PUB. COUNTRY: ENGLAND: United Kingdom  
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
 LANGUAGE: English  
 FILE SEGMENT: Priority Journals  
 ENTRY MONTH: 197907  
 ENTRY DATE: Entered STN: 19900315  
 Last Updated on STN: 19900315  
 Entered Medline: 19790716

L12 ANSWER 41 OF 45 MEDLINE  
 ACCESSION NUMBER: 79207186 MEDLINE  
 DOCUMENT NUMBER: 79207186 PubMed ID: 36795  
 TITLE: [Taurolin in peritonitis].  
 Taurolin bei Peritonitis.  
 AUTHOR: Wicki O; Pfirrmann R W  
 SOURCE: AKTUELLE PROBLEME IN CHIRURGIE UND ORTHOPADIE, (1979) (12) 42-8.  
 Journal code: 7705398. ISSN: 0378-8504.  
 PUB. COUNTRY: Switzerland  
 DOCUMENT TYPE: (CLINICAL TRIAL)  
 Journal; Article; (JOURNAL ARTICLE)  
 LANGUAGE: German  
 FILE SEGMENT: Priority Journals  
 ENTRY MONTH: 197908  
 ENTRY DATE: Entered STN: 19900315  
 Last Updated on STN: 19950206  
 Entered Medline: 19790816

L12 ANSWER 42 OF 45 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.  
 ACCESSION NUMBER: 79076228 EMBASE  
 DOCUMENT NUMBER: 1979076228  
 TITLE: [Severe bilio-pancreatic infection: the per- and postoperative use of an antiseptic alone, locally and systemically].  
 INFECTIONS BILIO-PANCREATIQUES SEVERES: UTILISATION ISOLEE, PER ET POST-OPERATOIRE, D'UN ANTISEPTIQUE PAR VOIES LOCALE ET GENERALE.  
 AUTHOR: Vankemmel M.; Scherpereel Ph.; Pfirrmann R.W.  
 CORPORATE SOURCE: Serv. Clin. Chir. Est, CHU, Cite Hosp., F 59000 Lille, France  
 SOURCE: Nouvelle Presse Medicale, (1978) 7/46 (4229).  
 CODEN: NPMDAD  
 COUNTRY: France  
 DOCUMENT TYPE: Journal  
 FILE SEGMENT: 037 Drug Literature Index  
 LANGUAGE: French

L12 ANSWER 43 OF 45 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.  
 ACCESSION NUMBER: 79095681 EMBASE  
 DOCUMENT NUMBER: 1979095681  
 TITLE: [Localized irrigation-lavage and sequential utilization of a new antiseptic via local and systemic administration. Preliminary communication concerning two cases of suppurative pancreatic necrosis].  
 IRRIGATION-LAVAGE FOCALISEE ET UTILISATION SEQUENTIELLE D'UN NOUVEL ANTI-SEPTIQUE PAR VOIES LOCALE ET GENERALE.  
 NOTE PRELIMINAIRE A PROPOS DE DEUX CAS DE NECROSE PANCREATIQUE SUPPUREE.  
 AUTHOR: Vankemmel M.; Scherpereel Ph.; Pfirrmann R.W.  
 CORPORATE SOURCE: Dept. Anesth. Reanim. B, CHU, 59000 Lille, France

SOURCE: Annales de l'Anesthesiologie Francaise, (1978) 19/11-12  
(919-922).  
CODEN: AANFAE  
COUNTRY: France  
DOCUMENT TYPE: Journal  
FILE SEGMENT: 037 Drug Literature Index  
009 Surgery  
004 Microbiology  
030 Pharmacology  
024 Anesthesiology  
048 Gastroenterology  
LANGUAGE: French  
SUMMARY LANGUAGE: English

L12 ANSWER 44 OF 45 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1977:127298 CAPLUS  
DOCUMENT NUMBER: 86:127298  
TITLE: Bis(1,1-dioxoperhydro-1,2,4-thiadiazin-4-yl)methane-  
containing drugs for treating dental infections,  
especially periodontosis  
INVENTOR(S): Geistlich, Peter; Pfirrmann, Rolf W.  
PATENT ASSIGNEE(S): Geistlich, Ed., Soehne A.-G. fuer Chemische Industrie,  
Switz.  
SOURCE: Ger. Offen., 13 pp.  
CODEN: GWXXBX  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2628265	A1	19770120	DE 1976-2628265	19760624
DE 2628265	C2	19860731		
GB 1557163	A	19791205	GB 1975-26767	19750624
PRIORITY APPLN. INFO.:			GB 1975-26767	19750624

AB Dental formulations for preventing and treating periodontosis contain  
0.5-3% **taurolin** (I) [19388-87-5] as the active ingredient. The  
comps. can also contain surfactants and caries-preventing agents. For  
example, a mouthwash contained 2.0% I, 1.0% Fexapon K12, 15.0% EtOH, 0.5%  
10% saccharin soln., 0.5% mint oil, 2.0% Tween 80, and 79.0% H2O.

L12 ANSWER 45 OF 45 MEDLINE DUPLICATE 8  
ACCESSION NUMBER: 77118331 MEDLINE  
DOCUMENT NUMBER: 77118331 PubMed ID: 828157  
TITLE: **Taurolin**, a new chemotherapeutic agent.  
AUTHOR: Browne M K; Leslie G B; Pfirrmann R W  
SOURCE: JOURNAL OF APPLIED BACTERIOLOGY, (1976 Dec) 41 (3) 363-8.  
Journal code: 7503050. ISSN: 0021-8847.  
PUB. COUNTRY: ENGLAND: United Kingdom  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 197704  
ENTRY DATE: Entered STN: 19900313  
Last Updated on STN: 19900313  
Entered Medline: 19770415